APPENDIX B STATION SERVICE POWER

B-1. Definition. Station service power, for the purpose of this appendix, is the supply of electrical power required to operate a flood control, navigation or other non-hydropower facility or for other project purposes by a hydroelectric unit.

B-2. Requirements.

- a. Station service power can only be provided when the commercial power source is determined to be unreliable and/or when there is a specific engineering requirement for using a hydroelectric unit.
- b. Any excess power generated will be provided to the local power marketing agency (PMA). A power marketing agreement will be developed with the PMA for the excess power generated. The agreement will be prepared for the signature of the Division Commander.
- c. Operation of the hydroelectric unit will be coordinated with the PMA in accordance with ER 1130-2-510.
- d. An economic analysis will be performed in accordance with ER 1105-2-100. The costs to be used in the analysis of economic feasibility are total implementation (design, construction, interest during construction) and annual costs (operation, maintenance, repair, replacement and rehabilitation). Station service generator benefits are estimated as the marginal (incremental) costs of production that would be required of the local power supplier in the absence of the station service generator.
- e. A complete engineering analysis will be performed. All engineering and design services will be provided by HDC.
- f. The project potential for hydropower, including flow duration, pool-duration, available head and proposed hydraulic capacity of the unit will be analyzed.
- g. A study of the environmental and operational impacts to the facility will be performed. The project should not continue if any adverse impacts are revealed.
- h. The maximum installed capacity of the station service hydroelectric unit will be less than the peak load.